

WHAT IS CLAIMED IS:

1. A compressor having a discharge valve mechanism which comprises:

5 a valve plate having a discharge hole communicating with a cylinder;  
a plate-like discharge valve being flexible, said plate-like discharge valve having a fixed portion fixed to the valve plate and a movable portion extending from the fixed portion in a first direction parallel to the valve plate, said movable portion being faced to an exit end of the discharge hole; and

10 a valve retainer having a curved surface faced to and spaced from the movable portion and adapted to limit the movement of the movable portion, the curved surface having a plurality of parts different in radius of curvature from one another in a second direction parallel to the valve plate and perpendicular to the first direction.

15 2. The compressor according to claim 1, wherein the curved surface has a first and a second end opposite to each other in the second direction, the radius of curvature gradually varying to have a minimum value at the first end and to have a maximum value at the second end.

20 3. The compressor according to claim 2, wherein the first end of the curved surface defines a minimum movable range of the movable portion, the second end of the curved surface defining a maximum movable range of the movable portion, a ratio between the minimum movable range and the maximum movable range being designed between 1.5 and 3.0.

25 4. The compressor according to claim 2, wherein said curved surface smoothly varies between the first and the second ends.

5. The compressor according to claim 1, wherein the curved surface has a part along a conical shape.

6. The compressor according to claim 1, wherein the valve retainer has a flat surface parallel to the valve plate and overlapping the fixed portion of the plate-like discharge valve.